

### **REMARKS**

With the foregoing amendment claims 1, 3, 5, 6, 8, 10, 12-14 and 16-20 are pending in the application. Claims 1, 5, 8, 13, 17 and 18 are independent. No new matter has been added by the amendments. Applicant respectfully requests reconsideration of the Rejections/Objections, which are discussed below.

The Examiner has relied on the following references to reject the claims of the application: Huang et al., Nakata et al., and Chen et al.

Applicant respectfully submits that the pending claims are patentable over the art of record. With respect to method claims 1, 5, 8, and 13, each of these method claims requires the following steps:

dividing a sound packet of the phonetic waveform into parts of  
consonant, wind and vowel; [and]  
determining characteristic parameters of the part of vowel  
including turning number, wave number and slope of one of  
repeated waveforms that constitute the part of vowel, and  
recognizing the part of vowel by comparing the determined  
characteristic parameters against a rule for vowel recognition;

The above steps of method claims 1, 5, 8, and 13 are part of a novel and non-obvious way of determining the vowel in a sound packet. Applicants have discovered that each vowel waveform can be analyzed to determine three characteristics parameters including (1) turning number, (2) wave number and (3) slope, thereupon a vowel can be recognized according to a set of comparison rules performed on those three determined parameters. For example, when wave number  $\geq$  slope, the vowel is "Y," or if wave number  $\geq 6$  and turning number  $< 10$ , the vowel is "Y" otherwise it is "—" (see for example page 15 and figure 9.).

The above described technique for determining the vowel in a sound packet is neither taught nor suggested by the art of record. That is, none of the prior art (including Huang et

al., Nakata et al., and Chen et al.) discloses, teaches, or suggests using the turning number, wave number and slope of the waveform together with a set of comparison rules to determine the vowel.


More specifically, with respect to claim 1, 5, 8, and 13, none of the prior art (including Huang et al., Nakata et al., and Chen et al.) discloses, teaches, or suggests a method comprising the step of: “determining ... turning number, wave number and slope of ... the part of vowel, and ... comparing the determined characteristic parameters against a rule for vowel recognition,” as is recited in claim 1, 5, 8 and 13. Accordingly, Applicant respectfully requests that the rejection of claims 1-16 be withdrawn.

With respect to independent claims 17 and 18, these claims are patentable over the art of record for the reasons give above because, like claims 1, 5, 8 and 13, claims 17 and 18 each require: “determining characteristic parameters of the part of vowel including turning number, wave number and slope from one of repeated waveforms that constitute the part of vowel, and recognizing the part of vowel by comparing the determined characteristic parameters against the principle for vowel recognition”. Therefore, Applicant respectfully requests that the rejection of claims 17 and 18 also be withdrawn.

### CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections, and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

RESPECTFULLY SUBMITTED,					
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